UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/742,660 | 12/21/2000 | Hidenori Nishikawa | JP9 1999 0205 US1 | 6984 |

45095          7590          04/01/2009
HOFFMAN WARNICK LLC
75 STATE ST
14 FL
ALBANY, NY 12207

| EXAMINER |
|---|
| NELSON, FREDA ANN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3628 | |

| NOTIFICATION DATE | DELIVERY MODE |
|---|---|
| 04/01/2009 | ELECTRONIC |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

UNITED STATES PATENT AND TRADEMARK OFFICE

————————

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

————————

*Ex parte* HIDENORI NISHIKAWA

————————

Appeal 2008-5596
Application 09/742,660
Technology Center 3600

————————

Decided:[1]  March 30, 2009

————————

Before ANTON W. FETTING, DAVID B. WALKER, AND BIBHU R.
MOHANTY, *Administrative Patent Judges.*

WALKER, *Administrative Patent Judge.*

DECISION ON APPEAL

---

[1]The two-month time period for filing an appeal or commencing a civil
action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date
shown on this page of the decision.  The time period does not run from the
Mail Date (paper delivery) or Notification Date (electronic delivery).

## STATEMENT OF THE CASE

The Appellant seeks our review of the Examiner's final rejection of claims 1-6 under 35 U.S.C. § 134 (2002). We have jurisdiction under 35 U.S.C. § 6(b) (2002). We affirm-in-part.

The Appellant claims a data processing system that, in an application wherein a customer charge calculation method is frequently changed, flexibly performs calculations, and relates in particular to a data processing system that employs a rule for performing such calculations (Specification 1:5-9). Claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. A data processing system for calculating charges to customers, comprising:
>
> a database, for managing customer data required for calculating said charges to customers;
>
> rule management means, for storing rule sets that, in advance, each define only one charge calculation method that is employed in accordance with a type of customer service that is rendered, wherein the charge calculation method includes at least one rule based instruction for calculating a discount, wherein said at least one rule based instruction references a discount table that includes a discount threshold value; and
>
> calculation means, which, for each different type of customer service provided to a customer, identifies the rule set associated with the type of customer service, and calculates charges for each event belonging to the type of customer service based on the associated rule set, in accordance with the contents of said customer data read from said database.

## THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

| | | |
|---|---|---|
| Reeder | US 5,852,812 | Dec. 22, 1998 |
| Rubin | US 6,078,897 | Jun. 20, 2000 |
| Boardman | US 6,456,986 B1 | Sep. 24, 2002 |
| Carter | US 6,553,350 B2 | Apr. 22, 2003 |

1. The Examiner rejected claims 4-5 under 35 U.S.C. § 102(b) as anticipated by Reeder.

2. The Examiner rejected claim 1 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Rubin.

3. The Examiner rejected claims 2-3 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Carter in further view of Rubin.

4. The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as unpatentable over Reeder in view of Boardman.

## ISSUES

Has the Appellant shown that the Examiner erred in finding that Reeder discloses "associating a set of rules one-to-one with each service type provided by a service provider"? Has the Appellant shown that the Examiner erred in finding that the combination of Boardman and Rubin or the combination of Boardman, Carter, and Rubin discloses "rule sets that, in advance, each define only one charge calculation method that is employed in accordance with a type of customer service"?

FINDINGS OF FACT

We find the following enumerated findings to be supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. The Specification teaches

    Upon the receipt of a rule based instruction, or as needed, the calculator 101 employs an associated table to perform a calculation. The rule based instruction is one that is prepared in advance using an easy language that is especially prepared for use with predetermined calculations, such as calculations for discounts. The specifications for various discount services are written using the rule based instruction, and are implemented as a small program. That is, calculations required for individual discount services are performed by using a program that was written using the rule based instruction. A program module written using the rule based instruction is also called a rule set (group), and such a rule set is stored in a rule management unit (rule pool) 102. If necessary, a discount ratio designation table (discount table) 104 can be referred to for each rule, and a variable discount ratio can be separately designated in a rule based instruction.

    (Specification 9:11-28).

2. Reeder teaches a system that has the flexibility to give one customer a discounted price for a downloaded file while selling the same service to another customer at a discount. The pricing rule is designed to give

maximum flexibility to pricing particular events that occur within the system (Reeder, col. 16, ll. 19-24).

3. Reeder further teaches that a pricing rule may state that the selected event ID has an hourly charge of $10.00 before 5:00 p.m. and $20.00 for all events posted after 5:00 p.m. (Reeder, col. 18, ll. 5-7).

4. Reeder also teaches that when a customer downloads a file, an event object is created that can then be used in the billing system to charge the customer for the file (Reeder, col. 9, ll. 62-65).

5. Boardman teaches a system that uses decision networks to execute a Price Plan to rate an Event. A plan selection rule set is used to select a Price Plan for the Event and an Algorithm rule set is used to select an Algorithm to rate the Event. Conditions also are evaluated as the rule sets are traversed and include a program that determines if an Event qualifies for the Condition (Boardman, col. 1, ll. 50-57).

6. Boardman uses two types of decision networks, a Plan Selection Rule Set and an Algorithm Selection Rule Set, which are shown in Figures 1 and 2 respectively. The Plan Selection Rule set essentially guides the Event to Price Plans. The Algorithm Selection Rule Set is within the Price Plan and guides the Event to Algorithms. An Algorithm calculates a price or modifies a price (applies a discount). An Event can be priced by multiple Price Plans (Boardman, col. 2, ll. 42-50).

PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S. Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.").

In rejecting claims under 35 U.S.C. § 103(a), the examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *Id.* at 1445. *See also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a

6

whole and the relative persuasiveness of the arguments. *See Oetiker*, 977 F.2d at
1445; *Piasecki*, 745 F.2d at 1472.


ANALYSIS

Rejection of claims 4-5 under 35 U.S.C. § 102(b) as anticipated by Reeder.

 The Appellant argues that Reeder does not disclose "associating a set of
rules one-to-one with each service type provided by a service provider."
According to the Appellant, in Reeder, the price rule is determined based on the
service ID, event ID and the customer profile. (Br. 4, citing Reeder, col. 15, ll. 30-
31; see also col. 15, ll. 52-53, "'[l]ook up surcharge pricing rule and discount
pricing rule based on event [ID], service [ID], currency and subscription plan.'").
The Appellant therefore argues that, in Reeder, the price rule is determined based
on many factors, including event [ID], service [ID], currency and subscription plan
(Br. 4). The Appellant argues that other factors may not be considered in
establishing the one-to-one association between a service type and a rule set (Br.
5).

 The Examiner found that Reeder teaches associating a set of rules one-to-
one with each service type provided by a service provider (Answer 3, citing
Reeder, col. 16, ll. 19-24, col. 18, ll. 5-7). The Examiner further found that the
billable events such as disclosed in the Abstract and at column 9, lines 62-65 of
Reeder are services as claimed (Answer 9).

 The Appellant does not provide a lexicographic definition of service type in
the Specification, and the phrase "associating a set of rules one-to-one with each

service type provided by a service provider" appears only in the claims and not in the Specification. The Specification discloses that a program module written using a rule based instruction is also called a rule set (Finding of Fact 1). The Appellant's argument is not persuauasive, because the disputed phrase does not require that a rule be determined based on a single factor, only that it be associated on a one-to-one basis with a service type. The Appellant thus has failed to show that the Examiner erred in rejecting claims 4 and 5 as anticipated by Reeder.

Rejection of claim 1 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Rubin.

The Appellant argues that Boardman and/or Rubin do no teach or suggest "rule sets that, in advance, each define only one charge calculation method that is employed in accordance with a type of customer service." According to the Appellant, the selection of an algorithm in Boardman is based on many factors (conditions) following a tree structure and therefore does not define only one charge calculation method (Br. 5-6).

The Examiner found that Boardman teaches a Price Plan may consist of several Algorithms, each one used to rate different types of Events (e.g., a plan contains an algorithm for rating calling card calls, and a separate algorithm for rating regular direct dialed telephone calls) (Answer 10, citing Boardman, col. 4, ll. 42-46). The Examiner interprets this to mean that one calculation method is employed in regards to the service type/event. The Examiner also found that Price Plans 1-3 of Figure 1 correspond to Algorithms 1-3 in Figure 2 of Boardman.

The Appellant argues that the above finding illustrates the deficiencies of Boardman. The Appellant contends that (1) the price plan of Boardman does not teach the claimed rule set because it does not define only one charge calculation method; and (2) the algorithm of Boardman also does not teach the claimed rule set because the algorithm is not "employed in accordance with a type of customer service[.]" The Appellant further argues that, in Boardman, conditions are used to select an algorithm such that an algorithm is not employed in accordance with a type of service (Br. 6, citing Boardman, Fig. 2 and col. 4, ll. 4- 16 for examples of conditions) and Rubin does not overcome this deficiency of Boardman.

The passage cited by the Examiner does not teach that each Algorithm is used to rate different types of Events. It teaches that an Algorithm calculates a price or modifies a price (applies a discount) within a price plan and that an Event can be priced by multiple Price Plans (Finding of Fact 5). Because each Price Plan would have an Algorithm, the cited passage of Boardman does not teach "rule sets that, in advance, each define only one charge calculation method that is employed in accordance with a type of customer service." In fact, it appears to teach multiple price plans or charge calculation methods (Algorithms) can be applied to a particular event. The Appellant thus has shown that the Examiner erred in rejecting claim 1 as unpatentable over Boardman in view of Rubin.

Rejection of claims 2-3 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Carter in further view of Rubin.

The Appellant restates the arguments applied against the rejection of claim 1 and further argues that Carter does not overcome the argued deficiencies of

Boardman and Rubin (Br. 7). We agree with the Appellant. For the reasons stated above in connection with the rejection of claim 1, the Appellant has shown that the Examiner erred in rejecting claims 2 and 3 as unpatentable over Boardman in view of Carter in further view of Rubin.

Rejection of claim 6 under 35 U.S.C. § 103(a) as unpatentable over Reeder in view of Boardman.

The Appellant restates the arguments applied against the rejection of claims 4 and 5 above, and further argues that Boardman does not overcome the argued deficiencies of Reeder (Br. 7). These arguments are equally unpersuasive in the context of an obviousness rejection over Reeder and Boardman. The Appellant thus has failed to show that the Examiner erred in rejecting claim 6 as unpatentable over Reeder in view of Boardman.

CONCLUSIONS

We conclude that the Appellant has not shown that the Examiner erred in finding that Reeder discloses "associating a set of rules one-to-one with each service type provided by a service provider." We conclude that the Appellant has shown that the Examiner erred in finding that the combination of Boardman and Rubin or the combination of Boardman, Carter, and Rubin discloses "rule sets that, in advance, each define only one charge calculation method that is employed in accordance with a type of customer service."

<center>DECISION</center>

The decision of the Examiner to reject claims 4-5 under 35 U.S.C. § 102(b) as anticipated by Reeder and claim 6 under 35 U.S.C. § 103(a) as unpatentable over Reeder in view of Boardman is affirmed.  The decision of the Examiner to reject claim 1 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Rubin and claims 2-3 under 35 U.S.C. § 103(a) as unpatentable over Boardman in view of Carter in further view of Rubin is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).  *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).


<center>AFFIRMED-IN-PART</center>


hh

HOFFMAN WARNICK, LLC
75 STATE ST.
14 FL,
ALBANY, NY  12207